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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/732,674 | 12/08/2000 | Ralph Coleman Hedden | H26187-US | 2847 |

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EXAMINER

MOORE JR, MICHAEL J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2666

DATE MAILED: 02/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/732,674

Applicant(s)

HEDDEN, RALPH COLEMAN

Examiner

Michael J Moore, Jr.

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/8/2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1, 4-14, and 16-18** are rejected under 35 U.S.C. 102(b) as being anticipated by Iwata (U.S. 5,933,425).

Regarding claim **1**, Iwata describes a digital message routing system that contains all of the limitations of claim **1**. Providing a unique prioritization tag for each individual digital message is anticipated by Figures 4A, 6A, 8A, and 10A of Iwata. These figures show administrative weights assigned to different network links based upon quality of service (QoS) issues such as available cell rate and cell transfer delay. These QoS parameters specified by the user affect routing priority and therefore constitute a unique prioritization tag. Supplying prioritized criteria from the user to overlay software, automatically choosing the corresponding DSP route, and routing the corresponding digital message(s) are all anticipated by the user-specified QoS parameters (transmission delay time, delay time variation, transmission error rate, and cell loss rate) and routing methods spoken of in columns 1 and 2 of Iwata. Refer to figures 4A, 6A, 8A, and 10A for examples of these QoS parameters within a link state database (overlay

software). Also, refer to figures 4B, 4C, 6B, 6C, 6D, 8B, 8C, and 10B for examples of routing methods based upon these QoS parameters.

Claim 14 contains the same limitations as claim 1 except for the method of choosing a DSP route from at least two DSPs by the overlay software. Since Iwata describes a network system that chooses a route from multiple available links, claim 14 is anticipated for the same reasons as claim 1 above.

Regarding claims 4-13 and 16-18, these claims are rejected as stated in the first Office Action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 3, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (U.S. 5,933,425) in view of Harper (U.S. 5,432,776).

Regarding claims 2, 3, and 15, Iwata's invention as described above does not disclose a method for tracking the chosen DSP route(s) for accounting purposes. However, Harper discloses a message network monitoring system that contains some nodes that are monitored for accounting purposes. In column 1, lines 54-62, Harper describes how usage monitoring can be used to detect bottleneck areas in the network and also to conduct customer-billing practices. Harper continues in column 6, lines 13-27 that his invention generates

accounting digests that contain information concerning the nature and route of the message. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make use of accounting purposes to track DSP routes. The motivation for doing this would be to improve network efficiency and/or provide a means for billing customers for network services.

Response to Arguments

5. Applicant's arguments filed January 13, 2004 have been fully considered but they are not persuasive. The corrections made to the specification, the drawings, and the claims in order to obviate the previous objections are proper and have been entered. However, the claim rejections of claims **1-18** remain standing for the reasoning that follows.

It is argued that lwata does not teach a prioritization tag that is attached to each individual digital message. Regarding claim **1**, the claimed prioritization tag provided to each digital message is comprised of user chosen routing priority criteria. lwata teaches user-specified QoS parameters (cell loss rate, transmission error rate, jitter, transmission delay) that determine how a digital message is routed. Based upon the value of these specified parameters, the message is routed accordingly. These QoS parameters constitute a prioritization tag based on how the prioritization tag is claimed.

It is also argued that the lwata patent implies that routing for messages remains generally constant. The method of the lwata patent uses periodic time-based updates of the resource constraints of each link in conjunction with the user-specified QoS parameters in order to accomplish effective message routing. This method implies that

the routing of messages is not a constant process, but is adjusted in time in accordance with the current reliability and availability of the network.

It is also argued that the Iwata patent does not determine which route/network, as advertised, best meets the tagged criteria. Iwata uses the current resource constraints of the network routes along with the user-specified QoS parameters to determine which route to use that satisfies the user-specified criteria.

Regarding claims **2, 3, and 15**, it is argued that the Harper reference is concerned with how a network is used rather than using prioritization tags in conjunction with digital messages. Claims **2 and 15** claim the tracking of message routes for accounting purposes. Harper teaches how digital message routing can be monitored for accounting purposes such as usage monitoring, error detection, and also customer billing practices. It is believed that with these references it would be obvious for someone of ordinary skill in the art at the time of the invention to use the prioritization tag QoS methods of claims **1 and 14** along with message route accounting in order to keep track of user network use. Claim **3** further limits claim **2** by adding a step of preparing a billing record of the chosen route. Harper teaches how digital message routing can be monitored for the accounting of customer billing. An obvious result of the accounting of customer billing would be the creation of some form of a billing record.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J Moore, Jr. whose telephone number is (703) 305-8703. The examiner can normally be reached during the hours of 8:30am - 5:00pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mjm MM

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